

Grant Number 1083

Project Title Hands-On Equations

Please select the **MAIN** curriculum area your grant addresses. Math - SecondaryDoes your grant have a technology component? (Will you have technology equipment, software, etc. in your budget?)  
 No  
 Yes

### Primary Contact Information

First Name Amanda

Email amanda.passmore@allenisd.org

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Last Name Passmore

Phone Number 469-667-1268

Campus Ereckson Middle School

Main Subject Math - Secondary

Grade(s) 8

I have co-applicants. 

### Social Media

Please provide your work-related social media contact information.

Facebook

Twitter

Other (please specify)

### Additional Grant Applicants

	First Name	Last Name	Campus	Grade
Jan		Cook	Ereckson Middle School	8
Jeri		King	Ereckson Middle School	8
Katie		Kelley	Ereckson Middle School	8
LaShey		Sisemore	Ereckson Middle School	8

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### Campus/Student Information

Your campus: Ereckson Middle School

Will other campus' be involved/impacted by this grant?  No  
 Yes

Your grade(s): 8

Will other grades be involved/impacted?  No  
 Yes

### Project Purpose

What is the problem, need or opportunity that this grant will address? Describe the impact of this project on your students. (500 words or less.)

Some of our low students who are still struggling with some basic Pre-Algebra skills will benefit from having an opportunity to use these manipulatives to visually see how they can rearrange equations/inequalities. Solving equations is a topic that many of our 8th grade on-level students struggle with, even though they have been learning about equations since elementary. Using a manipulative, they might be able to finally connect the dots.

### Project Description

How will the project or program be implemented? Describe activities and tasks. Who is the target population and in what ways will they benefit? (500 words or less.)

We will use these manipulatives during our unit on solving equations (unit 4). We will also use them in pull out groups for tutoring. When it gets closer to STAAR test, we can also use them again to reinforce the basic skills of solving equations and inequalities.

### Project Summary

Provide a brief summary for use on the Foundation's website and social media. (2-3 brief sentences)

I would like to incorporate the use of manipulatives to help students finally master the concept of re-arranging and solving equations/inequalities. The Hands-On Equations made by Borenson will help our low performing 8th grade students finally make the connection on how to solve equations/inequalities and prepare them for high school math.

### Allen ISD Goals/ TEKS

Which Allen ISD goals/TEKS does this project support? Provide only two or three examples.

The 8th grade math TEKS that this supports are:

8.8A Write one-variable equations or inequalities with variables on both sides that represent problems using rational number coefficients and constants.

8.8B Write a corresponding real-world problem when given a one-variable equation or inequality with variables on both sides of the equal sign using rational number coefficients and constants.

8.8C Model and solve one-variable equations with variables on both sides of the equal sign that represent mathematical and real-world problems using rational number coefficients and constants.

### Measurement

What specific measurements will be used to evaluate the effectiveness of the project? (500 words or less)

After completing the unit on solving equations, students will be given quizzes and tests to see which topics they have mastered and which they need remediation on. We can compare the data from our test scores from previous school years. We can also observed students and see if their confidence level increases throughout math class. Once a students' confidence has been boosted in math, they are willing to try harder problems and take risks.

### Teaching Methods

What teaching methods will be used to implement this project? (500 words or less.)

We will use these manipulatives as a whole class lesson, but also during small group activities (stations). They can also be used before or after school during tutoring sessions with students.

### Timeline

What is the project timeline and the date of implementation?

Solving equations is a skill that is implemented throughout the entire school year. We do focus on increasing the rigor of solving equations/inequalities during Unit 4 in the beginning of second semester. As an 8th grade math team, we have used the topic of solving equations as our "Student Learning Objective (SLO)" and are monitoring progress throughout the year.

### Curriculum/System Support

Explain how this idea or project enhances/supports Allen ISD curriculum or existing systems.

As the level of math rises from elementary to middle to high school, the use of hands-on manipulatives tends to decrease. Solving basic equations is a skill that students begin to learn in elementary school and should be mastering it by the time they leave Pre-Algebra in 8th grade. However, each year we have a group of low students who continue to struggle with solving equations/inequalities. By providing them the tools to visually see and move around numbers in an equation, they will hopefully be better prepared to enter Algebra 1 in high school.

**Budget Details \*\* All awarded funds will be available by September of the next school year.**

Budget Item	Item Type	Unit Cost	Quantity	Total Cost
Class Set of Hands-On Equations for 30 students	Instructional Supplies or Resources	245.0	5	1225.0
The Hands-On Equations Learning System	Instructional Supplies or Resources	34.95	5	174.75
Class Set of HOE Fractions for 30 Students	Instructional Supplies or Resources	224.5	5	1122.5
The HOE Fractions Learning System	Instructional Supplies or Resources	29.5	5	147.5

**BUDGET TOTAL 2,669.75**

Are there any additional funds available for this grant? Campus or District Funds? PTA funds? Let us know if you have or will be seeking funds from other sources to help with this project.

Additional funds?  No  
 Yes

### Principal Approval Required

Please provide the Name and Email of your PRINCIPAL. (Not your name)

First Name	Last Name	Email Address(Completed)
Leslie	Norris	leslie.norris@allenisd.org

### Applicant Signature

By entering my name below I signify that I understand that if I move within the District and have written the grant myself, I may take the grant with me to my school (as long as it is appropriate for my classes). If I have written the grant as part of a team, I will leave the grant behind with the team. If I leave AISD, I will leave the grant with the school for which I wrote the grant. As a condition of this grant, I will complete an evaluation form provided by the Foundation.

Signature Amanda Passmore

Date 01/23/2019

I certify that this would be a good use of funds for our school and this grant supports the district goals and/or our campus improvement plans. \*\*Do NOT include any identifiers, such as: campus name, your name, teachers name or mascot \*\*

No actions possible.

### Comments

I approve this to be further reviewed.

### State Change History

State Change amanda.passmore@allenisd.org  
01/23/2019 15:27:59  
Submitted

State Change \*\*\*\*\*  
01/24/2019 14:52:05  
Accepted

### Grant Status

Grant Awarded  Yes

No

Award Amount 1450